

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Barkalow et al.

Serial No.: 10/617,905

Filing Date: July 11, 2003

For: METHOD OF FORMING A  
SUGARLESS COATING ON  
CHEWING GUM

Examiner: Arthur L. Corbin

Group Art Unit No.: 1761

Confirmation No.: 4960

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Appellants hereby reply to the Examiner's Answer dated June 19, 2007, which maintains all rejections previously appealed.

**A. Claims 1-19 are patentable over U.S. Patent No. 4,317,838 (Cherukuri '838) and U.S. Patent No. 4,238,510 (Cherukuri '510).**

**i. Claims 1-19**

The Answer perpetuates several errors that underlie the improper rejection of claims 1-19 over U.S. Patent No. 4,317,838 (Cherukuri '838) or U.S. Patent No. 4,238,510 (Cherukuri '510).

The Answer proceeds as if a *prima facie* obviousness rejection has been made out in the Final Rejection. However, the Answer does not even address the arguments presented in Appellants' Brief as to why the prior art would not be modified as suggested in the Final Rejection. The Answer perpetuates the myth that it would have been obvious to increase the amount of filler in the dusting mix in the Cherukuri '838

and '510 patents, either because the increased amount called for in claims 1-19 would be "an optimum amount", or increasing the amount would reduce the cost of the coating. First, in Cherukuri '838, the dusting mix contains calcium carbonate as an "antisticking" component. The term "filler" is used in only as a secondary descriptor for the antisticking component. See, col. 3, line 55. Thus the calcium carbonate is not being used primarily as a filler in the dusting mix, and optimization of the Cherukuri dusting mix would not lead one of ordinary skill in the art to increase the level of the antisticking component from the maximum 20% specified in Cherukuri '838 to a range of about 40% to about 80% specified in claim 1, or the range of about 45% to about 55% specified in claim 19. Using more than the maximum amount of a component specified does not come from "optimization." One of ordinary skill in the art trying to optimize the amount of antisticking material in Cherukuri's dusting mix would expect it to be somewhere between 2 and 20%, not twice the maximum amount.

The reasons why one of ordinary skill in the art would not increase the level of calcium carbonate in the dusting mix of Cherukuri '838 as a cost saving measure are spelled out on pages 8-10 of Appellants' Brief. The Answer does not refute these reasons.

Regarding the unexpected results of the invention, on page 4 the Answer states that the enumerated advantages of the present invention "are also apparent in the chewing gum products prepared in either primary reference, especially since each of these listed advantages is couched in relative terms without any clear and/or definite meaning in the art." First, there is nothing in the prior art to suggest that the advantages of the invention are present in the products made according to the Cherukuri '838 or '510 patents. This statement in the Answer is pure speculation on the part of the Examiner. The Answer gives no citation of support for this position.

Nothing in the references describes what effects the composition of the dusting mix has on the properties of the coating. Cherukuri '510 states that the products of its examples have "a soft chew with good sweetness and flavor release properties" (col. 7, lines 63-64) and the coating applied will produce "a pleasant tasting sugarless coated sugarless candy" (col. 8, lines 26-27). Other than the background description of a desire to produce "a uniform sugarless coating, with good appearance, and flavor

release and having bite-through and chew properties of a soft crystal” (col. 1, lines 51-53), there is no indication of the properties of the coating. Cherukuri ‘838 is directed to finding a single syrup that can be used to form a coating using sorbitol, and is an improvement to the Cherukuri ‘510 process. At best the resulting products would presumably have the same properties as in the Cherukuri ‘510 patent.

Second, the advantages of the invention, while stated in relative terms, do not make those advantages any less significant. Pages 16 and 17 of the specification describe making products using the claimed invention and making products without any filler in the dusting mix, and how these products compared with respect to faster coating time, more corner strength, less chipping, increased pellet crunch and improved shelf life. These terms, used to describe the advantages of the invention, are terms that do have a meaning in the art. The Answer gives no citation for the contrary position. The inventors used these terms in their evaluation of the products made according to the invention precisely because others in the industry would know what they were talking about.

The Answer takes the position that the unexpected results outlined in the specification and Brief cannot be used to overcome a *prima facie* case of obviousness because there is no comparison with the closest prior art. However, the Answer cites no support for the position that a comparison of the invention has to be to the art cited in the Final Rejection, and there is no such requirement in the law. The question is whether the results found by the inventors would have been expected in view of the prior art. The Appellants’ Brief explains why the results would not have been expected from Cherukuri ‘838 and Cherukuri ‘510, even though no direct tests comparing the inventive methods to the examples in the references were conducted. The Answer does not refute the logic of the explanation presented, but dogmatically adheres to the position that a *prima facie* case of obviousness cannot be overcome without comparison to the cited prior art.

There is simply no reason one of ordinary skill in the art would have expected from the Cherukuri references that using the claimed levels of filler in the dusting mix in the methods of the invention would have provided the enumerated advantages, and the

comparison to the products made without any filler in the dusting mix are adequate, based on the logic presented in the Brief, to show these unexpected results.

**ii. Claim 18**

Claim 18 specifies that the method results in pellets with a coating having sufficient strength to prevent the corners from chipping during normal manufacturing and distribution of the coated pellets. This additional feature is not addressed in the Answer. Further, this claim specifically calls for an advantage couched in terms that one of ordinary skill in the art would readily understand.

**iii. Claim 14**

Claim 14 requires the use of a high maltitol content syrup in the coating syrup, which means that over 80% of the solids in the maltitol syrup are maltitol. The Answer states that the appellants have failed to support the conclusion of improved results for this claimed feature, and have not given any factual evidence on the record. This position is contradicted by the statements in the specification regarding Examples B and 2, where a maltitol syrup containing 88% maltitol was used. As noted on page 17, lines 1-3, the use of the high maltitol content syrup gave improved corner strength of pellets during processing.

The Answer points out that col. 3, line 14 of Cherukuri '838 suggests using maltitol syrup to make the disclosed coating syrup, in contradiction to a statement on page 11 of the Brief. Appellants recognize that the hydrogenated glucose syrups with 20 to 65% maltitol may include syrups with 50 to 65% maltitol, which are sometimes referred to as maltitol syrups, and to that extent stand corrected. However, as argued in the Brief, there is no disclosure in the applied references of using a syrup that has a maltitol content of over 80% by weight of the solids. Further, there is no reason one would "optimize" the hydrogenated glucose syrup in Cherukuri '838 to increase its maltitol content to over 80%. Maltitol syrups with this high of a level of maltitol are used for different purposes than syrups disclosed by Cherukuri '838, and would not be substituted without hindsight of the invention of claim 14. For these reasons, claim 14 is further patentable over the cited references.

**B. CONCLUSION**

The Answer does not refute that Appellants have made a novel and nonobvious contribution to the art of forming sugarless coatings on chewing gum cores. Rather, the Answer further demonstrates that the references are being modified based solely on hindsight reconstruction of the invention. The Final Rejection should therefore be reversed.

Respectfully submitted,

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